

What is claimed is:

1 1. An image processing apparatus for transmitting and receiving
2 data to/from an external apparatus that has a storage apparatus,
3 the image processing apparatus comprising:

4 a first data acquiring unit that acquires image data
5 to be subjected to image processing;

6 a storage unit that stores the acquired image data;

7 a transmission unit that transmits the acquired image
8 data to the external apparatus so that the transmitted image
9 data is stored in the storage apparatus thereof;

10 a judgment unit that judges, prior to commencement
11 of the image processing, whether the image data is stored in
12 the storage unit;

13 a second data acquiring unit that acquires the image
14 data from the external apparatus if the judgment unit judges
15 negatively; and

16 an image processing unit that executes the image
17 processing using the image data stored in the storage unit if
18 the judgment unit judges positively, and executes the image
19 processing using the image data acquired by the second data
20 acquiring unit if the judgment unit judges negatively.

1 2. The image processing apparatus of Claim 1 further comprising

2 a deletion instructing unit that, after the image
3 processing is completed, sends to the external apparatus an
4 instruction to delete the image data from the storage apparatus.

1 3. The image processing apparatus of Claim 1, wherein
2 the transmission unit transmits the acquired image
3 data page by page to the external apparatus.

1 4. The image processing apparatus of Claim 3, wherein
2 the storage unit has a capacity only sufficient to store
3 one page of the image data, and
4 each time the image processing unit completes image
5 processing for one page of the image data stored in the storage
6 unit, the second data acquiring unit acquires from the external
7 apparatus another one page of the image data to be subjected
8 to the image processing next.

1 5. The image processing apparatus of Claim 1 further comprising
2 a memory that stores information regarding progress
3 of the image processing, wherein
4 when executing the image processing using the image
5 data acquired by the second data acquiring unit, the image
6 processing unit refers to the information stored in the memory
7 and executes the image processing for a part of the image data
8 that has not been subjected to the image processing yet.

1 6. The image processing apparatus of Claim 5, wherein
2 the information stored in the memory indicates pages
3 of the image data that have already been subjected to the image
4 processing.

1 7. The image processing apparatus of Claim 5, wherein
2 the memory is a nonvolatile memory.

1 8. The image processing apparatus of Claim 1, wherein
2 the external apparatus functions as a mail server,
3 the transmission unit transmits to the external
4 apparatus an electronic mail addressed to the image processing
5 apparatus and containing the acquired image data, and
6 the second data acquiring unit, if the judgment unit
7 judges negatively, acquires the electronic mail from the external
8 apparatus and extracts the image data from the acquired
9 electronic mail.

1 9. The image processing apparatus of Claim 8, wherein
2 the transmission unit converts the acquired image data
3 into Tag Image File Format, and transmits to the external
4 apparatus an electronic mail addressed to the image processing
5 apparatus and containing the image data having been converted
6 into Tag Image File Format, as an attached file.

1 10. The image processing apparatus of Claim 1, wherein
2 the storage unit is a volatile memory.

1 11. The image processing apparatus of Claim 1, wherein
2 the judgment unit judges whether the image data is
3 stored in the storage unit each time power is turned on and/or
4 each time the image processing apparatus recovers from a power

5 failure.

1 12. The image processing apparatus of Claim 11 further
2 comprising:

3 a reception unit that receives image processing jobs
4 each of which contains information specifying a start time at
5 which an image processing job is to be subjected to the image
6 processing; and

7 a start time judging unit that judges, each time power
8 is turned on and/or each time the image processing apparatus
9 recovers from a power failure, whether any of the image processing
10 jobs received by the reception unit has a start time that has
11 already reached, wherein

12 if the judgment unit judges negatively, and if there
13 is an image processing job that has been judged by the start
14 time judging unit as having a start time that has already reached,
15 the second data acquiring unit acquires image data for the image
16 processing job from the external apparatus earlier than image
17 data for the remaining image processing jobs received by the
18 reception unit.

1 13. The image processing apparatus of Claim 1, wherein
2 the image processing is an image forming process.

1 14. The image processing apparatus of Claim 1, wherein
2 the image processing is a fax transmission process.

1 15. The image processing apparatus of Claim 1, wherein
2 the first data acquiring unit is a receiving unit that
3 receives print data from an external terminal connected with
4 the image processing apparatus via a network.

1 16. The image processing apparatus of Claim 1, wherein
2 the first data acquiring unit is a fax receiving unit
3 that receives fax data from an external fax apparatus.

1 17. An image processing method for use in an image processing
2 apparatus that is operable to transmit and receive data to/from
3 an external apparatus that has a storage apparatus, the image
4 processing method comprising:

5 a first data acquiring step for acquiring image data
6 to be subjected to image processing;

7 a storage step for storing the acquired image data;

8 a transmission step for transmitting the acquired image
9 data to the external apparatus so that the transmitted image
10 data is stored in the storage apparatus;

11 a judgment step for judging, prior to commencement
12 of the image processing, whether the image data is stored in
13 the storage unit;

14 a second data acquiring step for acquiring the image
15 data from the external apparatus if the judgment unit judges
16 negatively; and

17 an image processing step for executing the image
18 processing using the image data stored in the storage unit if

19 the judgment unit judges positively, and executing the image
20 processing using the image data acquired by the second data
21 acquiring unit if the judgment unit judges negatively.

1 18. A program that is run in an image processing apparatus that
2 is operable to transmit and receive data to/from an external
3 apparatus that has a storage apparatus, the program causing the
4 image processing apparatus to execute:

5 a first data acquiring step for acquiring image data
6 to be subjected to image processing;

7 a storage step for storing the acquired image data;

8 a transmission step for transmitting the acquired image
9 data to the external apparatus so that the transmitted image
10 data is stored in the storage apparatus;

11 a judgment step for judging, prior to commencement
12 of the image processing, whether the image data is stored in
13 the storage unit;

14 a second data acquiring step for acquiring the image
15 data from the external apparatus if the judgment unit judges
16 negatively; and

17 an image processing step for executing the image
18 processing using the image data stored in the storage unit if
19 the judgment unit judges positively, and executing the image
20 processing using the image data acquired by the second data
21 acquiring unit if the judgment unit judges negatively.